

Work Order ID 93484

November-15-12 10:24:40 AM

\*93484\*

Page 1

Item ID: D3296-3

Revision ID:

Item Name: Door Panel

Start Date: 11/15/12 Start Qty: 1.00

Required Date: 11/15/12 Req'd Qty: 1.00

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start

\*NR1\*

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D3296

100

\*100\*

Waterjet

FLOW CNC Waterjet

FLOW WATER JET

Memo

1-Cut as per Dwg D3296

Dwg Rev: A

Prog Rev: A

2-Debur if necessary

0.00

0.00

0.00

0.00

110

\*110\*

QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

Memo

Accept

PRELIMINARY ISSUE

Setup Start

\*NS1\*

Stop

\*NS2\*

Cust Item ID:

Customer:

BOA

Rev B  
12/12/12

Jan 12-11-15

Jan 12-11-15

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>             Skid-tube <input type="checkbox"/>              Machining <input type="checkbox"/>              Thermoforming <input type="checkbox"/>              Large Fab <input type="checkbox"/> </div> <div>             Crosstube <input type="checkbox"/>              Small Fab <input type="checkbox"/>              Finishing <input type="checkbox"/>              Composite <input type="checkbox"/> </div> <div>             Water Jet <input type="checkbox"/>              Prod. Eng. Coord. <input type="checkbox"/>              Rec/Store/Packaging <input type="checkbox"/>              Supplier <input type="checkbox"/> </div> <div>             Engineering <input type="checkbox"/>              Quality <input type="checkbox"/>              Other <input type="checkbox"/> </div> </div>					
<b>Root Cause</b>	<b>Date</b>	<b>Step</b>	<b>Qty</b>	<b>Description of work order update or Non-conformance</b>	<b>Initial Chief Eng</b>	<b>Action Description</b>	<b>Sign &amp; Date</b>	<b>Verification</b>	<b>QC Inspector</b>		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											

FAULT CATEGORY									
<b>Landing Gear</b>			<b>General</b>						
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain	<input type="checkbox"/> Ovalized	<input type="checkbox"/> Pressure/Forced					
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Temperature/Cure					
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Weld					
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Wrong Stock Pulled					
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Part Moved						
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Positioned Wrong						
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread	<input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Other					
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset							
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration							
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence							
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions							

Work Order ID 93484

\*93484\*

Page 2

November-15-12 10:24:40 AM

Item ID: D3296-3

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Door Panel

Start Date: 11/15/12 Start Qty: 1.00 \*1\*

Cust Item ID:

Required Date: 11/15/12 Req'd Qty: 1.00 \*1\*

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start \*NR1\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC8- Inspect parts - second check  Memo	0.00 DAS 15 2-89 1277-13				1			
130 *130* Small Fab Small Fab	Small Fab  Memo Deburr	0.00 0.00							
140 *140* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1  Memo	0.00 0.00				1			MG 12-11-14

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

**FAULT CATEGORY**

Landing Gear	General	Other
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized
		<input type="checkbox"/> Over/Under tolerance
		<input type="checkbox"/> Part Incorrect
		<input type="checkbox"/> Part Lost/Missing
		<input type="checkbox"/> Part Moved
		<input type="checkbox"/> Positioned Wrong
		<input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced
		<input type="checkbox"/> Temperature/Cure
		<input type="checkbox"/> Weld
		<input type="checkbox"/> Wrong Stock Pulled
		<input type="checkbox"/> Other

# Work Order ID 93484

\*93484\*

Page 3

November-15-12 10:24:40 AM

Item ID: D3296-3 Accept \*N900040100\* Setup Start \*NS1\*  
Revision ID: Stop \*NS2\*  
Item Name: Door Panel  
Start Date: 11/15/12 Start Qty: 1.00 \*1\* Cust Item ID:  
Required Date: 11/15/12 Req'd Qty: 1.00 \*1\* Customer:  
Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start \*NR1\*  
QC: Date: SPC (Y/N): Date: Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	QC3- Inspect Part Finish	0.00							
*150*									
QC	Memo	0.00							
Quality Control									
160	Identify as per dwg & Stock Location:	0.00							
*160*									
Packaging	Memo	0.00							
Packaging									
170	QC21- Final Inspection - Work Order Release	0.00							
*170*									
QC	Memo	0.00							
Quality Control									

DAS 16 inspected to Rev B  
Drawings 12/12/14

12/12/14  
WME  
12-11-13

DAS  
300  
88

12/12/14

1X

12/11/18

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											
<b>FAULT CATEGORY</b>											
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other		



NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>					
<b>Root Cause</b>	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											
<b>FAULT CATEGORY</b>											
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other



# Picklist Print

November-15-12 10:24:40 AM

Page 1

Work Order ID: 93484

Parent Item: D3296-3

Parent Item Name: Door Panel

Start Date: 11/15/12

Required Date: 11/15/12

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP C05.10.14Added step 14KJ/EC  
IPP Rev:E Now on Waterjet 06-11-02 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M2024T3S.063

2024-T3 .063 sheet

Purchased

No

110

sf

244.4200

0.6532

~~0.6875789~~

0.2

Jan-11-15

Location

Loc Qty

Loc Code

MAT022

244.42

119916

0.1

121197

16.32

123654

36

123701

192

123654

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

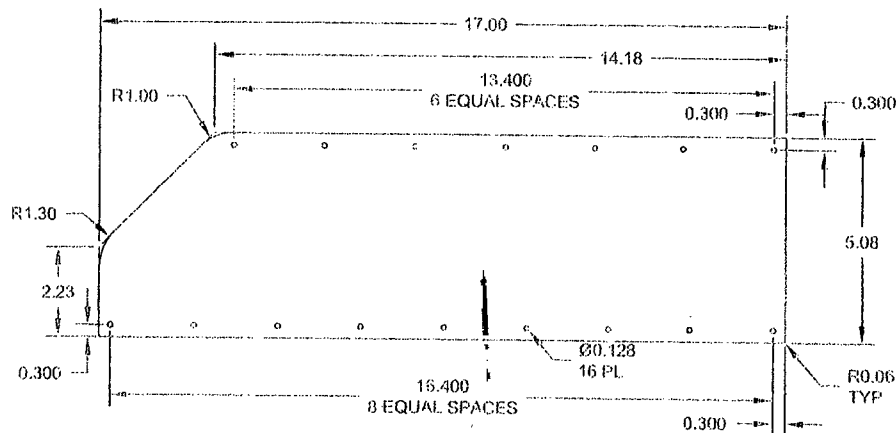
QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

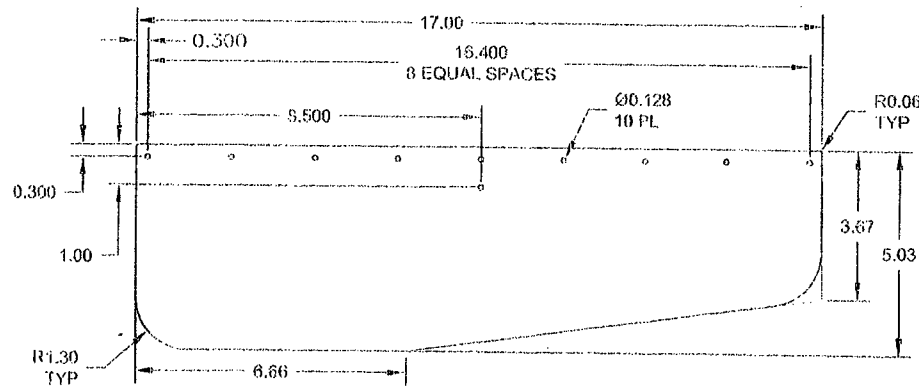
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other



D3296-1 DOOR PANEL



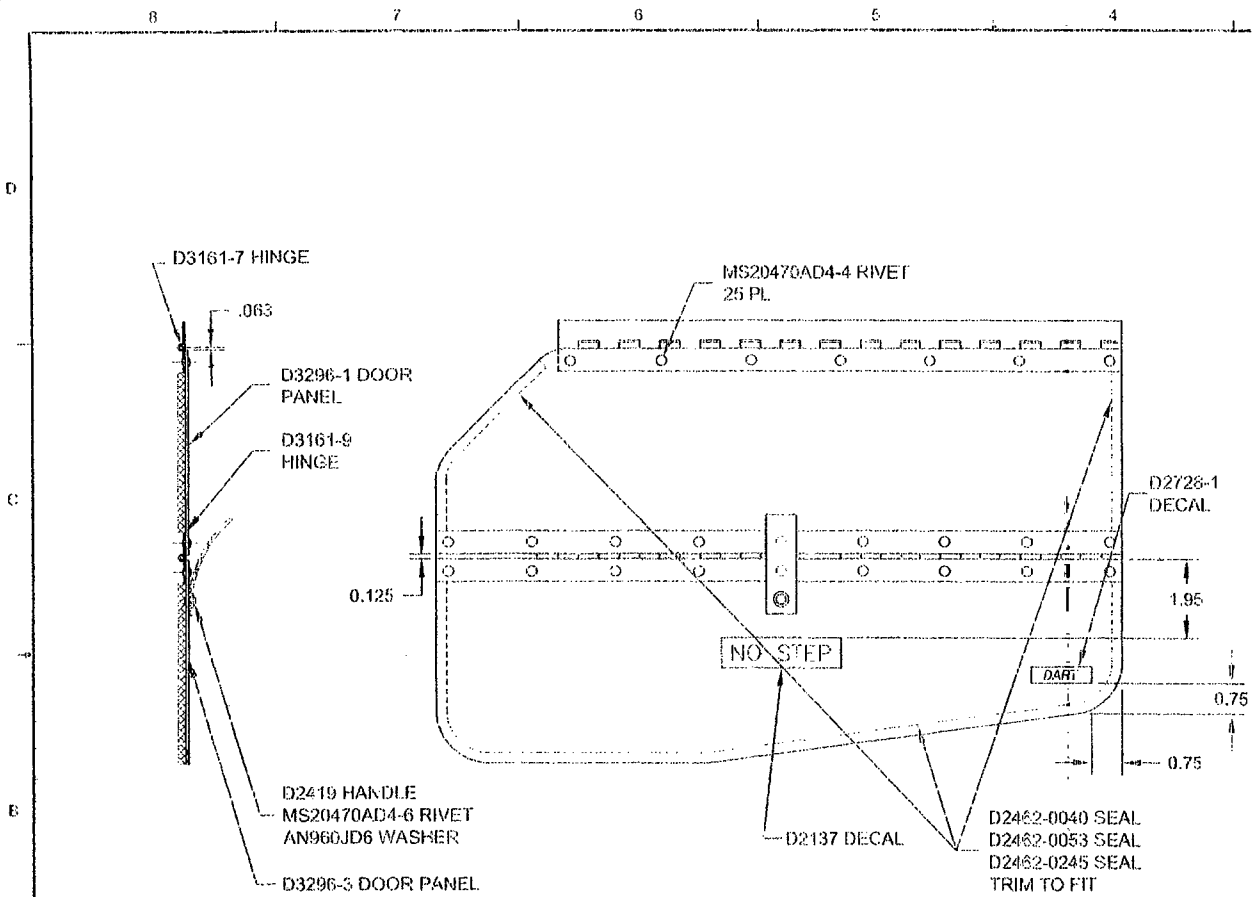
D3296-3 DOOR PANEL

PRELIMINARY ISSUE  
12.11.15

**D3296-1/3 NOTES:**

- 1) MATERIAL: 2024T3 ALUMINUM SHEET, 0.063 THICK, PER QQ-A-250/4  
OR AMS-QQ-A-250/4 OR AMS 4037 OR ASTM B209  
REF DART SPEC M2024T3S.063
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D3296-1 = 0.52 lbs; D3296-3 = 0.50 lbs

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. PB1
MFG. APPR.		D3296	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		DOOR ASSEMBLY	NTS
DATE	12.11.15	COPYRIGHT © 2015 BY DART AEROSPACE LTD	



D3296-041B DOOR ASSEMBLY, BLANK

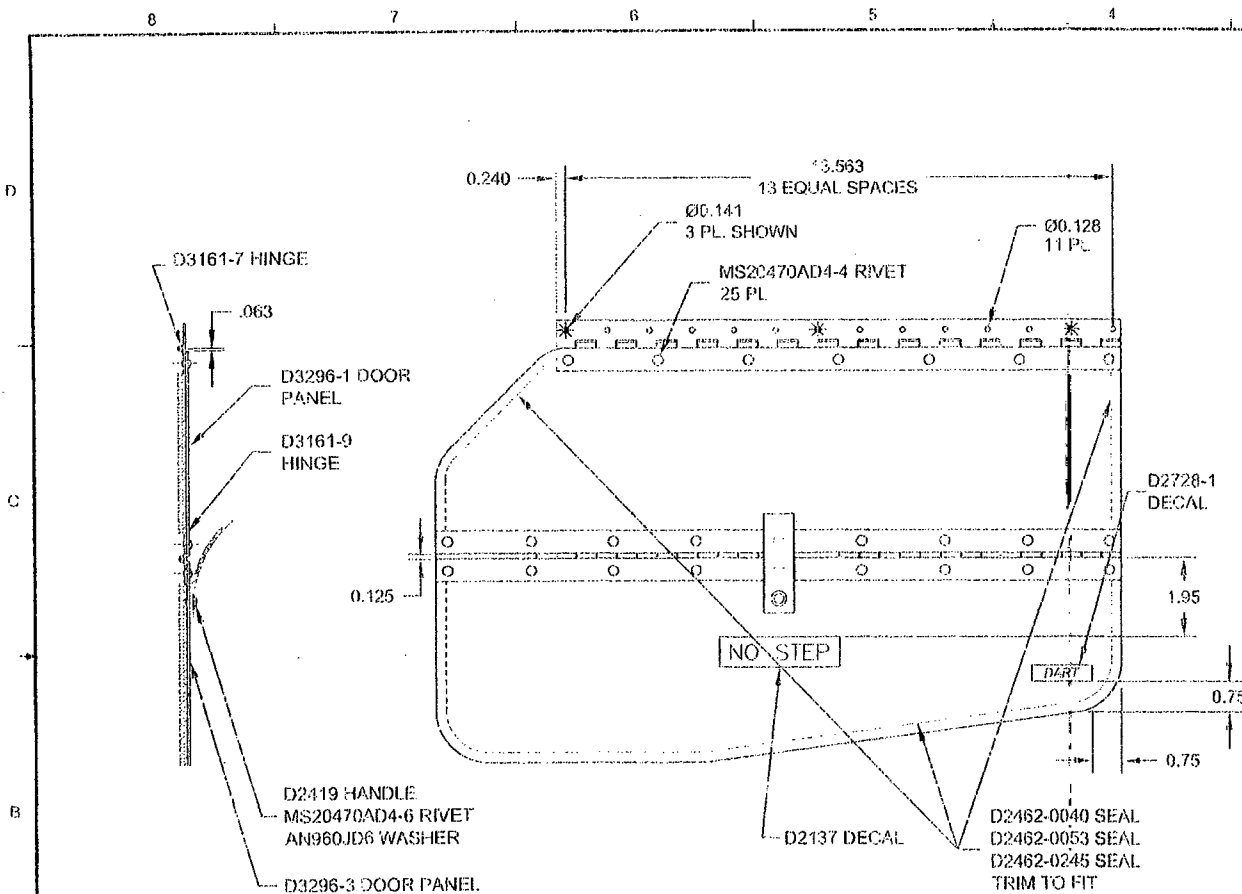
**D3296-041B NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT BLACK SANTEX (4.3.5.7) PER DART QSI C05 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.8 lbs
- 8) INSTALL D2137 AND D2728-1 DECALS, D2419 HANDLE, AND D2462 SEALS AFTER POWDER COATING
- 9) FOLD AND FASTEN D2419 TO FORM 2.5" LONG HANDLE

QTY	PART NUMBER	DESCRIPTION
X	D3296-041B	DOOR ASSEMBLY
1	D2419	HANDLE
2	D2462-0040	SEAL
1	D2462-0053	SEAL
1	D2462-0245	SEAL
1	D2728-1	DECAL
1	D2137	DECAL
1	D3161-7	HINGE
1	D3161-9	HINGE
1	D3296-1	DOOR PANEL
1	D3296-3	DOOR PANEL
1	NA51149DN632J	WASHER (OR AN960JD6)
25	MS20470AD4-4	RIVET
1	MS20470AD4-6	RIVET

PRELIMINARY ISSUE  
12.11.15

DESIGN	91	<b>DART AEROSPACE LTD</b>	
DRAWN	6	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. PB1
MFG. APPR.		D3296	SHEET 2 OF 3
APPROVED		TITLE	SCALE
DE APPR.		DOOR ASSEMBLY	NTS
DATE	12.11.15	COPYRIGHT © 2004 BY DART AEROSPACE LTD	



D3296-041 DOOR ASSEMBLY

**D3296-041 NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT BLACK SANDTEX (4.3.5.7) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.8 lbs
- 8) INSTALL D2137 AND D2728-1 DECALS, D2419 HANDLE, AND D2462 SEALS AFTER POWDER COATING
- 9) FOLD AND FASTEN D2419 TO FORM 2.5" LONG HANDLE

QTY	PART NUMBER	DESCRIPTION
-041	D3296-041	DOOR ASSEMBLY
1	D2419	HANDLE
2	D2462-0040	SEAL
1	D2462-0053	SEAL
1	D2462-0245	SEAL
1	D2728-1	DECAL
1	D2137	DECAL
1	D3161-7	HINGE
1	D3161-9	HINGE
1	D3296-1	DOOR PANEL
1	D3296-3	DOOR PANEL
1	NAS1149DN632J	WASHER (OR AN960JD6)
25	MS20470AD4-4	RIVET
1	MS20470AD4-5	RIVET

PRELIMINARY ISSUE  
12.11.15

PB1	ADD D3296-041B. REF. PAR 12-122.	MB	12.11.15
A	NEW ISSUE	CP	04.06.28
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	12.11.15		

**DART AEROSPACE LTD**  
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. REV. PB1  
D3296 SHEET 1 OF 3  
TITLE SCALE  
DOOR ASSEMBLY NTS

COPYRIGHT © 2004 BY DART AEROSPACE LTD  
ALL RIGHTS RESERVED. NO PART OF THIS DOCUMENT MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD.

# Receiving Report

Date: 12/11/12

Batch No: M/2 3654

Supplier: CAMP 1

Dart P/O: 18368

Packing Slip: Yes ☒ No ☐  
 Invoice: Yes ☐ No ☒  
 Receipt: Cash ☐ Cr ☒

Release Note Attached: Yes ☒ No ☐ N/A ☐  
 Waybill Attached: Yes ☐ No ☒ N/A ☐  
 Shipment Complete: Yes ☒ No ☐ N/A ☐  
 QC6 Inspection 14 12/11/13 N/A ☐  
 Work Order 9-85 N/A ☒

## Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments
<u>M41301R0700</u>		<u>12</u>	<u>0</u>	<u>0</u>	<u>12</u>	

Initials of receiver (if shipment OK) Level 12 [Signature]

Production/Admin: \_\_\_\_\_  
 Date \_\_\_\_\_  
 Received/Costing \_\_\_\_\_  
 Initial \_\_\_\_\_

Location \_\_\_\_\_



7J66 5L1

**TÉLÉPHONE : 450 377-4248**  
**FAX : 450 377-5698**

**MONTREAL : 514 336-4248**  
**FAX : 514 336-4246**

**DISTRIBUTEUR D'ACIER ET MÉTAUX SPÉCIALISÉS**  
**STEEL AND SPECIALTY METALS DISTRIBUTOR**

**ONTARIO : 1 800 667-4248**  
**FAX : 1 866 456-4242**

*On a du Savoir " 7ER*

**VENDU À / SOLD TO:**

**EXPÉDIEZ À / SHIP TO:**

613-632-5200

613-632-1053

DART AEROSPACE LTD  
1270 ABERDEEN STREET  
HAWKESBURY,  
ONTARIO  
K6A 1K7

DART AEROSPACE LTD  
1270 ABERDEEN STREET  
HAWKESBURY,  
ONTARIO  
K6A 1K7

COMMANDE  
ORDER

**Nº**

207698

DATE \_\_\_\_\_

08/11/12

**BON DE LIVRAISON**  
**PACKING SLIP**

**Ne**

DATE DE LIVRAISON  
DELIVERY DATE

12/11/12

VOTRE N° DE COMMANDE / YOUR P.O. N°	VEND. / SALESM.	CODE CLIENT / CUST. CODE	EXPEDIE PAR / SHIP VIA	TERMES / TERMS	TERR.	REMARQUES / REMARKS	PAGE N°
PD18368	V	DAER		NET 30 JOURS	PR		2/21

[illegible]

\* Unités de mesure : CLB Cent livres • CPI Cent pieds • UN Unité • PI Pied • PC Pied carré  
 • Units of measure: CLB Hundred pounds • CPI Hundred feet • UN Unit • PI Foot • PC Square foot

## CONDITIONS

[illegible]

## CONDITIONS

ALL SOLD AND DELIVERED MATERIALS REMAIN THE PROPERTY OF MOER CAMP INC. UNTIL PAYMENTS ARE MADE IN FULL, COMPLETE AND CASHED.  
ALL SELLER MATERIALS ARE AT THE BUYERS EXPENSE. ALL MATERIALS BEAR THE SAME WARRANTY AS GIVEN BY THE MANUFACTURER.  
THE BUYER HEREBY AGREES TO RESPECT THE FOLLOWING CONDITIONS: 30 DAYS FROM BILLING DATE AND THE BUYER AGREES TO PAY THE  
ORDER STRAIGHT AWAY (CASH OR DEBIT CARD) OR AFTER AN INVOICED PAST DUE ACCOUNTS OVER 30 DAYS. ANY DEFAULT IN RESPECT WITH THE  
ORDER STRAIGHT AWAY (CASH OR DEBIT CARD) OR AFTER AN INVOICED PAST DUE ACCOUNTS OVER 30 DAYS, THE BUYER SHALL BE  
IN DEFAULT OF THE CONDITIONS AND THE BUYER AGREES TO RETURN TO THE SELLER ALL THE CASH TO CLAIM FOR THE BALANCE OF THE ORDER.  
THE BUYER AGREES TO RETURN TO THE SELLER ALL THE CASH TO CLAIM FOR THE BALANCE OF THE ORDER. ANY MERCHANTS THAT  
DO NOT WANT TO BE MANAGED BUT OR MONITORED CASHMENT, MUST BE WITH OUR AUTHORIZATION AND ARE SUBJECT  
104-228-RESTRICTING-BUYER

MARCHANDISE RECUE EN BONNE CONDITION MERCHANDISE RECEIVED IN GOOD CONDITION

<b>X</b>	<i>S. K. ...</i>	AY	MM	JD
		12	11	18

SIGNATURE DU CLIENT / CUSTOMER'S SIGNATURE

**DATA**

**SOUS-TOTAL**  
**SUB TOTAL**

T.P.S.  
G.S.T.

T.V.Q. / T.V.H.  
Q.S.T. / H.S.T.

**TOTAL**

PRÉPARÉ / PREPARED.	VERIFIÉ / VERIFIED	LIVRÉ / DELIVERED	HEURE / TIME
PAR BY	PAR BY	PAR BY	

N° ENR. TPS/GST REG. N° R 135 534 717 • N° ENR. TVQ/GST REG. N° 1 015 668 543



SHIP TO:

SOLD TO:

**CERTIFIED TEST REPORT**Serial Number  
4271364

CUSTOMER PO NUMBER: C65030		WORK PACKAGE:	CUSTOMER PART NUMBER:		SHIP RUN/LOAD: 102383/5	GOVT CONTRACT NUMBER:	
KAISER ORDER NO: 1133501	LINE ITEM: 4	SHIP DATE: 2-AUG-2012	ALLOY: 2024	CLAD: ALCLAD	TEMPER: T3	PRODUCT DESCRIPTION: MRS Quality	
WEIGHT SHIPPED: 4806 LB	QUANTITY: 108 PCS EST.	TRUCK B/L #: 2038197	GAUGE: 0.0630 IN (1.6002 MM)		DIAMETER/WIDTH: 48.000 IN (1219.2 MM)	LENGTH: 144.000 IN (3657.6 MM)	

MHU 1609583: LOT 802810A4: 22 pieces; *D118690*  
 MHU 1809587: LOT 802810A4: 86 pieces; *D118691*

**Certified Specifications**

AMS 4041/RevQ  
 BATS 2505/RevNC  
 DMS 2174/RevB

AMS-QQ-A-250/5/RevA  
 CMMP 019/RevD  
 RMS 145/RevC

ASTM B 209/Rev10  
 CMMP 025/RevU

Test Code: 4013

**Test Results**

Lot: 802810A4 Cast 579

Drop 58

Ingot 3

Melted in USA

(ASTM E8/B557)  
 (EN 2002-1)

Tensile: Temper  
 T3

Dir / # Tests  
 LT / 2 (Min:Max)

Ultimate KSI (MPA)  
 83.3 : 83.6  
 (438 : 439)

Yield KSI (MPA)  
 43.6 : 44.3  
 (301 : 305)

Elongation %  
 19.6 : 20.0

MRS Deflection : 0.207 IN

(ASTM E1251)

Chemistry:

Actual(wt%)

SI

FE

CU

MN

MG

CR

ZN

TI

V

ZR

OTHER

0.07 / 0.19 /

4.4 / 0.54 /

1.4 / 0.01 /

0.13 / 0.02 /

0.01

0.00

TOT

0.03

*DAS*  
*14*  
*2-89* *12/11/13*

# CERTIFIED TEST REPORT

Serial Number  
4271364

## ALLOY LIMITS

	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
2024												
MIN(wt%)	0.00	0.00	3.8	0.30	1.2	0.00	0.00	0.00	0.00	0.00	EACH	0.05
MAX(wt%)	0.50	0.50	4.9	0.9	1.8	0.10	0.25	0.15	0.05	0.05	TOT	0.15
Liner Alloy:	1230											
MIN(wt%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	EACH	0.03
MAX(wt%)	0.25	0.30	0.10	0.05	0.05	0.03	0.05	0.03	0.03	0.03	TOT	0.00

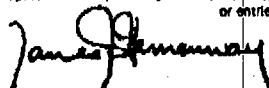
Aluminum Remainder

## TEST NOTES

MATERIAL MEETS MINIMUM RESIDUAL STRESS (MRS) / CHEMICAL  
MILLING QUALITY (CMQ) REQUIREMENTS.

## CERTIFICATION

hereby certifies that metal shipped under this order was melted in the United States of America or a qualifying country per DFARS 225.872-11el, was manufactured in the United States of America, and meets the requirements of DFARS 252.225 for domestic content. This material has been inspected, tested and found in conformance with the requirements of the applicable specifications as indicated herein. For material thicknesses outside specification limits, mechanical properties are as shown herein and chemical composition meets specification requirements. All metal which is solution heat treated complies with AMS 2772. Any warranty is limited to that shown on Kaiser's standard general terms and conditions of sale. Test reports are on file, subject to examination. Test reports shall not be reproduced except in full, without the written approval of Kaiser Aluminum Fabricated Products, LLC laboratory. The recording of false, fictitious or fraudulent statements or entries on the certificate may be punished as a felony under federal law. ISO-9001:2000 certified.



JAMES HEMENWAY, LABORATORIES SUPERVISOR



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO18368**

Purchase Order Date 11/08/12

PO Print Date 11/08/12

Page Number 1 of 1

**Order From :**

CAMPI STEEL  
935 BOUL. DU HAVRE  
VALLEYFIELD, QC J6S 5L1  
CA

VC-CAM002

**Contact Name**

**Vendor Phone** 800 667 4248

**Vendor Fax** 450 377 5696

**Vendor Account Nbr**

**Buyer**

Chantal Lavoie

**Requisition Nbr**

**Tax Resale Nbr**

10127-2607

**Terms**

Net 30

**Currency**

CAD

**FOB**

Destination-Collect

**Ship To :**

DART AEROSPACE LTD

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

**FAKED**

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	M2024T3S.063	2024-T3 .063 sheet	11/12/12 Yes	96.00 sf	Yours ppd	\$10.0448	\$964.30
<b>Special Inst:</b> MATERIAL: 2024-T3 ALUMINUM SHEET AS PER QQ-A-250/4 OR AMS-QQ-A-250/4 OR AMS 4037 OR ASTM B209							
2	M4130NR0.750	4130 steel RD bar .750"	11/12/12 Yes	12.00 f	Yours ppd	\$15.0000	\$180.00
<b>Special Inst:</b> MATERIAL: 4130N ROUND BAR AS PER MIL-S-6758 OR AMS 6348/6370/6528							

**PO Total:**

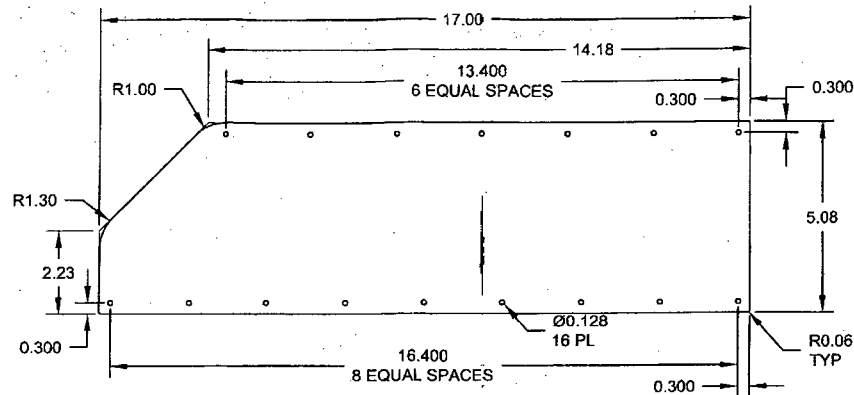
**\$1,144.30**

**MATERIAL CERTIFICATION  
REQ'D UPON DELIVERY**

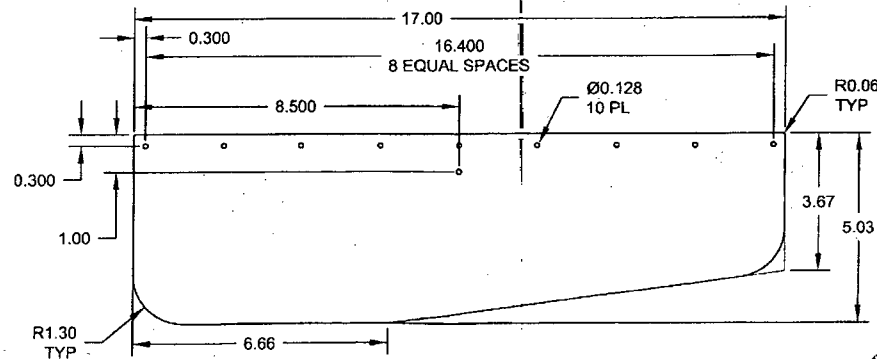
**Change Nbr:** 1

**Change Date:** 11/08/12

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required **YES** NO



D3296-1 DOOR PANEL



D3296-3 DOOR PANEL

**D3296-1/3 NOTES:**

- 1) MATERIAL: 2024-T3 ALUMINUM SHEET, 0.063 THICK, PER QQ-A-250/4 OR AMS-QQ-A-250/4 OR AMS 4037 OR ASTM B209 REF DART SPEC M2024T3S.063
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D3296-1 = 0.52 lbs; D3296-3 = 0.50 lbs

DESIGN	9	<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3296	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		DOOR ASSEMBLY	NTS
DATE	12.11.15	<small>COPYRIGHT © 2004 BY DART AEROSPACE LTD THIS DOCUMENT IS UNCLASSIFIED AND CONFIDENTIAL AND IS RELEASED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

RELEASED  
2012-11-21

93484